

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An isolated ~~human~~ antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), comprising a heavy chain and a light chain, wherein the heavy chain comprises a heavy chain variable region comprising ~~an amino acid sequence as set forth in any of SEQ ID NO: 10, SEQ ID NO: 14, or SEQ ID NO: 16, or an antigen-binding or an immunologically functional immunoglobulin fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 63, SEQ ID NO:66, and SEQ ID NO: 69.~~

2. (Currently Amended) An isolated ~~human~~ antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), comprising a heavy chain and a light chain, wherein the light chain comprises a light chain variable region comprising ~~an amino acid sequence as set forth in any of SEQ ID NO: 12 or SEQ ID NO: 18, or an antigen-binding or an immunologically functional immunoglobulin fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 71, SEQ ID NO: 73, and SEQ ID NO: 75.~~

3-9. (Canceled)

10. (Currently Amended) ~~The~~ An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), wherein the antibody of claim 5, wherein the heavy chain comprises a heavy chain variable region comprising having an amino acid sequence as set forth in SEQ ID NO: 16, or an antigen-binding fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 63, SEQ ID NO:66, and SEQ ID NO: 69 and or an immunologically functional immunoglobulin fragment thereof, and the light chain comprises a light chain variable region comprising having an amino acid sequence as set forth in SEQ ID NO: 18, or an antigen-binding fragment thereof, or an immunologically functional immunoglobulin fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 71, SEQ ID NO: 73, and SEQ ID NO: 75.

11-31. (Canceled)

32. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, wherein the heavy chain and light chain are connected by a flexible linker to form a single-chain antibody.
33. (Original) The antibody of claim 32, which is a single-chain Fv antibody.
34. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, which is a Fab antibody fragment.
35. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, which is Fab' antibody fragment.
36. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, which is a (Fab')₂ antibody fragment.
37. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, wherein the antibody is a fully human antibody.
38. (Currently Amended) The antibody of claim 1, 2, or 10, 3, 4, 5, 12, or 25, wherein the antibody inhibits binding of IL-1 to its receptor.
- 39-45. (Canceled)
46. (Currently Amended) An isolated ~~human~~ antibody comprising:
- human heavy chain framework regions, a human heavy chain CDR1 region comprising SEQ ID NO: 63, a human heavy chain CDR2 region comprising SEQ ID NO: 66, and a human heavy chain CDR3 region comprising, ~~wherein the human heavy chain CDR3 region has the amino acid sequence of SEQ ID NO: 67, SEQ ID NO: 68, or SEQ ID NO: 69;~~ and
 - human light chain framework regions, a human light chain CDR1 region comprising SEQ ID NO: 71, a human light chain CDR2 region comprising SEQ ID NO: 73, and a human light chain CDR3 region comprising, ~~wherein the human light chain CDR3~~

~~region has the amino acid sequence of SEQ ID NO: 74 or SEQ ID NO: 75;~~
~~wherein the antibody specifically binds to interleukin-1 receptor type 1 (IL-1R1).~~

47.-56. (Canceled)

57. (Currently Amended) The antibody of claim 510, which is an IgG2 antibody.

58. (Currently Amended) The antibody of claim 510, which binds specifically to the ~~polypeptide~~
amino acid sequence of SEQ ID NO: 76.

59. (Currently Amended) The antibody of claim 510, ~~which~~ wherein the antibody binds specifically
~~to a region to a portion of the amino acid sequence of IL-1R1 that, wherein the portion of the amino~~
acid sequence to which the antibody specifically binds comprises the amino acid sequence YSV.

60-61. (Canceled)

62. (New) A composition comprising a pharmaceutically acceptable carrier, excipient or
diluent, and the antibody of claim 10.

63. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier,
excipient or diluent and a therapeutically effective amount of the antibody of claim 10.

64. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-
1R1), comprising a heavy chain and a light chain, wherein the heavy chain comprises a heavy chain
variable region comprising the amino acid sequence of SEQ ID NO: 80, or an antigen-binding fragment
thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 63, SEQ ID NO: 66, and
SEQ ID NO: 69.

65. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-
1R1), comprising a heavy chain and a light chain, wherein the light chain comprises a light chain
variable region comprising the amino acid sequence of SEQ ID NO: 81, or an antigen-binding fragment

thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 71, SEQ ID NO: 73, and SEQ ID NO: 75.

66. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), wherein the antibody comprises a heavy chain variable region comprising the amino acid sequence of SEQ ID NO: 80, or an antigen-binding fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 63, SEQ ID NO: 66, and SEQ ID NO: 69; and a light chain variable region comprising the amino acid sequence of SEQ ID NO: 81, or an antigen-binding fragment thereof, wherein the antigen-binding fragment comprises at least SEQ ID NO: 71, SEQ ID NO: 73, and SEQ ID NO: 75.

67. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), comprising a heavy chain and a light chain, wherein the heavy chain comprises a heavy chain variable region comprising SEQ ID NO: 80.

68. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), comprising a heavy chain and a light chain, wherein the light chain comprises a light chain variable region comprising SEQ ID NO: 81.

69. (New) An isolated antibody that specifically binds interleukin-1 receptor type 1 (IL-1R1), wherein the antibody comprises a heavy chain variable region comprising SEQ ID NO: 80, and a light chain variable region comprising SEQ ID NO: 81.

70. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 wherein the heavy chain and light chain are connected by a flexible linker to form a single-chain antibody.

71. (New) The antibody of claim 70, which is a single-chain Fv antibody.

72. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 which is a Fab antibody fragment.

73. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 which is Fab' antibody fragment.
74. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 which is a (Fab')₂ antibody fragment.
75. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 wherein the antibody is a fully human antibody.
76. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 wherein the antibody inhibits binding of IL-1 to its receptor.
77. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 which is an IgG2 antibody.
78. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 which binds specifically to the amino acid sequence of SEQ ID NO: 76.
79. (New) The antibody of any of claims 46, 64, 65, 66, 67, 68, or 69 wherein the antibody binds specifically to a portion of the amino acid sequence of IL-1R1, wherein the portion of the amino acid sequence to which the antibody specifically binds comprises the amino acid sequence YSV.
80. (New) A composition comprising a pharmaceutically acceptable carrier, excipient or diluent, and the antibody of any of claims 46, 64, 65, 66, 67, 68, or 69.
81. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, excipient or diluent and a therapeutically effective amount of the antibody of any of claims 46, 64, 65, 66, 67, 68, or 69.